

### Abstract

[0044] A wireless transmission and reception system to convey analog signals within a local transmission area. The wireless transmission system includes a first encoder to receive an analog signal, to digitize the analog signal, and to compress the digitized analog signal using MP-3 compression; a modulator to modulate a carrier signal with the compressed digitized analog signal; and a transmitter for wireless transference of the modulated RF carrier. The reception system has a receiver to acquire the modulated carrier signal; demodulator to extract the compressed digitized analog signal from the modulated carrier signal; and a first decoder to decompress the compressed digitized analog signal using MP-3 decompression and to convert the digitized analog signal to a reproduction of the analog signal.